

A B S T R A C T

A heat absorbing film (14) made of an oxide is formed on a conductive reflecting film (13) by applying and baking a sol containing a material, which is to form the oxide, in a colloidal state. Conditions under which a vacuum evaporation system for forming the conductive reflecting film (13), and an applying/baking system for forming the heat absorbing film (14) are operated need not be changed, and the heat absorbing film (14) having small variations in thickness and quality can be formed on the conductive reflecting film (13). Reflection and radiation of heat from the conductive reflecting film (13) to a color selection electrode are suppressed effectively, so that a color cathode-ray tube in which a decrease in color purity is small can be manufactured.